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Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	2	of	5
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**Complete if Known**

Application Number	10/772,980
Filing Date	February 6, 2004
First Named Inventor	Marcus Weck
Art Unit	1713
Examiner Name	***
Attorney Docket Number	G082 1010.1 (50644-296201)

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	7*
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>6</sup> (if known)				
MM		JP 09255686	09/30/97	Kemipuro Kasei KK		
MM		JP 2000021573	01/21/00	Canon, Inc.		
MM		JP 2001284052	10/12/01	Matsushita Electric Ind. Co. Ltd.		

**Examiner  
Signature**

John Hall

Date  
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1011365

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
mt		TAKESHI TOMINAGA et al., "Luminescent Component", XP002287238, STN Database Accession No. 2001: 778307 Abstract, JP 2001 297881, October 26, 2001, Chemical Abstracts Service, Columbus, Ohio	
		SHUJI IWASAKI et al., "Zinc Complex and Organic Electroluminescent (EL) Device Using the Complex", XP002287239, STN Database Accession No. 2001: 573264 Abstract, JP 2001 213866, August 7, 2001, Chemical Abstracts Service, Columbus, Ohio	
		HODAKA TSUGE et al., "Organic Electroluminescent Component", XP002287240, STN Database Accession No. 2000: 638398 Abstract, JP 2000 252072, September 14, 2000, Chemical Abstracts Service, Columbus, Ohio	
		TAKESHI TOMINAGA et al., "Electroluminescent Component", XP002287241, STN Database Accession No. 2000:274718 Abstract, JP 2000 123972, April 28, 2000, Chemical Abstracts Service, Columbus, Ohio	
		KIDO, JUNJI et al., "Orange Color Electroluminescence from Bis (2-styryl-8-Quinololinato)zinc(II)", Chemistry Letters 1997, The Chemical Society of Japan, 1997	
		ZHONGMIN, SU et al., "Electronic Property and Molecule Design for Luminescent Metal Complexes of Tris(8-Hydroxyquinoline) Gallium", XP009033203 Science in China, Series B: Chemistry, Vol. 43, No. 6, December 2000	
		RAJ, D.S., "Coordination Polymers Based on Bis-Ligand: 1,7-DI(8-Hydroxy-5-Quinoliny)AZA-1, 3, 5-Heptatriene-3-OL(DHQAHT)", XP009033212, Oriental Journal of Chemistry, Vol. 17, No. 3, 2001	
		MEYERS, AMY et al., "Design and Synthesis of Alq3-Functionalized Polymers", XP002287215, Vol. 36, No. 6, American Chemical Society, pages 1766-1768, 2003	
		DUANN, YEH-FANG et al., "The Characteristic of Photoluminescence of tris-(7-Substituted-8-Hydroxyquinoline) Aluminum Complexes and Polymeric Complexes", XP009033202, Applied Organometallic Chemistry, Vol. 17, pages 952-957, 2003	
mt		MEYERS, AMY et al., "Solution and Solid-State Characterization of Alq3-Functionalized Polymers", XP002287214, Chemistry of Materials, Vol. 16, No. 7, pages 1183-1188, 2004	

Examiner Signature	<i>Robert Hurl</i>	Date Considered	<i>10/12/05</i>
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MM		Chemical Journal of Chinese Universities, XP009033211, Vol. 21, No. 9, pages 1416-1421, September 9, 2000	
		CHEN, C.H. et al., "Metal Chelates as Emitting Materials for Organic Electroluminescence", Coordination Chemistry Reviews 171, pages 161-174, 1998	
		SHEATS, JAMES R. et al., "Organic Electroluminescent Devices", Science, New Series, Vol. 273, No. 5277, pages 884-888, August 16, 1996	
		TANG, C.W. et al., "Organic Electroluminescent Diodes", Appl. Phys. Lett. 51, pages 913-915, September 21, 1987	
		TANG, C.W. et al., "Electroluminescence of Doped Organic Thin Films", J. Appl. Phys. 85 (9), pages 3610-3616, May 1, 1989	
		SHEATS, JAMES R., "Stacked Organic Light-Emitting Diodes in Full Color", Science, New Series, Vol. 277, No. 5323, pages 191-192, July 11, 1997	
		JIANPING, LU et al., "Synthesis and Characterization of a Novel AlQ3-Containing Polymer", Journal of Polymer Science: Part A: Polymer Chemistry, Vol 38, pages 2887-2892, 2000	
		JANG, HYOSOOK et al., "Synthesis and Characterization of New Luminescent Materials Containing Various Substituted 8-Quinolinolate", Synthetic Metals 121, pages 1667-1668, 2001	
		HOPKINS, T.A et al., "Substituted Aluminum and Zn Quinolates with Blue-Shifted Absorbance/Luminescence Bands: Synthesis and Spectroscopic, Photoluminescence, and Electroluminescence Characterization", American Chemical Society, Vol. 8, pages 344-351, 1996	
MM		COLLE, MICHAEL et al. "Preparation and Characterization of Blue-Luminescent Tris(8-hydroxyquinoline) Aluminum (Alq3)", Advanced Functional Materials, Vol. 13, No. 2, pages 108-112, February 2003	

Examiner Signature	<i>Marcus Weck</i>	Date Considered	10/13/05
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ML		BRINKMANN, MARTIN et al., "Correlation Between Molecular Packing and Optical Properties in Different Crystalline Polymorphs and Amorphous Thin Films of mer-Tris(8-Hydroxyquinoline)Aluminum(III)", American Chemical Society, Vol 122, pages 5147-5157, 2000	
		BRAUN, M. et al., "A New Crystalline Phase of the Electroluminescent Material Tris(8-hydroxyquinoline) Aluminum Exhibiting Blueshifted Fluorescence", American Institute of Physics, Vol. 114, No. 21, pages 9625-9632, June 1, 2001	
		FISCHER, HANNS, "The Persistent Radical Effect: A Principle for Selective Radical Reactions and Living Radical Polymerizations", American Chemical Society, Vol 101, pages 35 81-3610, November 7, 2001	
		HAWKER, CRAIG J. et al., "New Polymer Synthesis by Nitroxide Mediated Living Radical Polymerizations", American Chemical Society, Vol. 101, pages 3661-3688, October 25, 2001	
		KAMIGAITO, MASAMI et al., "Metal-Catalyzed Living Radical Polymerization", American Chemical Society, Vol. 101, pages 3689-3745, December 12, 2001	
		BUCHMEISER, MICHAEL R., "Homogeneous Metathesis Polymerization by Well-Defined Group VI and Group VIII Transition-Metal Alkylidenes: Fundamental and Applications in the Preparation of Advanced Materials", American Chemical Society, Vol 100, pages 1565-1604, March 16, 2000	
		HAWKER, CRAIG J., "Living" Free Radical Polymerization: A Unique Technique for the Preparation of Controlled Macromolecular Architectures", Accounts of Chemical Research, Vol 30, No. 9, pages 373-382, March 18, 1997	
		SAPOCHAK, LINDA S. et al., "Electroluminescent Zinc(II) Bis(8-hydroxyquinoline): Structural Effects on Electronic States and Device Performance", American Chemical Society, Vol 124, No. 21, pages 6119-6125, February 5, 2002	
		SAPOCHAK, LINDA S. et al., "Effects of Systematic Methyl Substitution of Metal (III)Tris(n-Methyl-8-Quinololato) Chelates on Material Properties for Optimum Electroluminescence Device Performance", American Chemical Society, Vol 123, No. 26, pages 6300-6306, June 9, 2001	
ML		STUBBS, LUDGER P. et al., "Towards a Universal Polymer Backbone: Design and Synthesis of Polymeric Scaffolds Containing Terminal Hydrogen-Bonding Recognition Motifs at Each Repeating Unit", Chemistry A European Journal, Vol 9, No. 4, pages 992-999, 2003	

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